

The “Praetorium” at Musmiye, Again

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A mong the photographic resources at Dumarton Oaks are negative copies of an outstanding collection of pictures taken in 1875 by Tancrede R. Dumas of Beirut during an expedition to Transjordan led by Selah Merrill on behalf of the American “Palestine Exploration Society.”¹ These rare views of sites and monuments from southern Lebanon, the Hauran, and Transjordan have yet to be fully exploited, though they have already proven valuable in many studies. For example, in 1975 Stephen Hill used two of the photographs to further our understanding of the so-called Praetorium at Musmiye (see *DOP* 17, 374 ff.). This building, no longer extant, was one of the most intriguing monuments in southern Syria, for its early use of the cross-in-square plan may have been a forerunner of church architecture.² The aim of this paper is to correct and clarify the definition of its structural components and suggest that the origin of its unique design is derived from the tetrakionia.

Musmiye, ancient Phaene, situated at the north entrance to el-Leja, owed its rise to prominence in regional affairs to the construction, in the years 160–186 C.E., of the Roman road from Damascus to Bostra, traversing the infamous Bandits' Land of Trachon. The unusually high number of Latin inscriptions found at the site, together with numerous Greek ones, indicate that it was the base of operations for the Roman army units deployed in work projects and in garrisoning the area.³ This military aspect of the town may have prompted C. J. Melchior de Vogüé, who recorded the monu-

ment in 1861–62, to designate it as a praetorium, for neither the layout of the interior columns nor its roof construction resembled any temple in Syria or, for that matter, any temple elsewhere.⁴ The names of co-emperors Marcus Aurelius and Lucius Verus and the legate of Syria, Avidius Cassius, recorded in an inscription above the main portal, securely date the erection of the building to the years between 164 and 169 C.E.⁵ It is therefore reasonable to assume that the building at Musmiye served as the prototype for the nearby Tychaion at es-Sanamein (dated 191 C.E.) and the temple at Slem, since both have an almost identical interior rear elevation—an apse flanked by two-storied room openings—and a somewhat similar arrangement of interior columns.⁶ This resemblance led other scholars to identify the building at Musmiye as a temple. It is advisable to defer a judgment between these two equally likely suggestions as to the function of the building until its remains are relocated and excavated. (There is conflicting evidence even with regard to its orientation, east or north.)

E. Weigand discussed previous research on the building in great detail, as well as the gradual collapse of the structure, which had been completely dismantled prior to 1890.⁷ He based his description of the structure and his interpretation of its design on a careful scrutiny of all descriptions, plans, and drawings produced by nineteenth-

¹S. Merrill, “Archaeologist's Report,” *Palestine Exploration Society*, Fourth Statement, January 1877 (New York, 1877), 29–59; H. I. MacAdams, *Studies in the History of the Roman Province of Arabia: the Northern Sector*, BAR International Series 295 (Oxford, 1986), 234–38, Catalogue 259–75.

²J. Lassus, *Sanctuaires chrétiens de Syrie* (Paris, 1947), 143 f.; G. Stanzl, *Längbau und Zentralbau als Grundthemen der Frühchristlichen Architektur: Überlegungen zur Entstehung der Kuppelbasilica* (Vienna, 1979), 46.

³MacAdams, *Arabia*, 54–57.

⁴C. J. M. de Vogüé, *Syrie central: Architecture civile et religieuse du Ier au VIIIe siècle*, I (Paris, 1865), 45–46, pl. vii.

⁵P. Le Bas and W. H. Waddington, *Voyage archéologique en Grèce et en Asie Mineure*, III: *Inscriptions grecques et latines* (Paris, 1870), no. 2525.

⁶H. C. Butler, *Architecture and Other Arts, Southern Syria*, PPUAES, division II, section A (Leiden, 1916), 315–22, 356–59; J. Dentzer-Feydy, “Décor architectural et développement du Hauran dans l'antiquité,” in J.-M. Dentzer, ed. *Hauran, I: Recherches archéologiques sur la Syrie du sud à l'époque hellénistique et romaine*, II (Paris, 1986), 297, pl. xvii.

⁷E. Weigand, “Das sogenannte Praetorium von Phaena-Mismije,” *Würzburger Festgabe Heinrich Bulle* (Stuttgart, 1938), 71–92.

century travelers. Most of his analysis is still valuable and need not be repeated here. His contention, however, that the interior columns were a Byzantine addition, though proven wrong by Hill, must be taken up anew.

Selah Merrill's description of the building, published in a rare and short-lived journal (see above, note 1, p. 37), seems to have escaped the notice of Weigand and subsequent scholars. The relevant passage is reproduced here for the sake of completeness:

This place, besides its numerous stone houses and other buildings, has one of the best preserved ancient temples of the Hauran. In front of the temple was a large paved court, extending on each side beyond the temple itself, and the blocks of basalt, of which the pavement was made, are as smooth and level to-day as when they were placed in position by the Roman workmen. This paved court appears to have extended around at least a part of the temple, and possibly the whole of it, like a driveway: and over it, on each side, in a line with the front of the temple, was an arch. In front of this paved court I counted forty or more broken columns, all placed on end, like a line of posts, with the intervals filled in with stones, the whole serving as a fence. The order of architecture here is the Doric outside and the Corinthian inside. We secured a photograph of a section of the interior showing the architecture. Like very many of the Hauran temples, it has been used as a church, and still later as a mosque. The walls have all been shaken and cracked by earthquakes. The roof yet remains, except the dome. The roof is of stone, and the slabs, which are nine feet long, rest at each end on corbels, *i.e.*, other slabs, eighteen inches or two feet in length, which being bound into the wall, serve not only as shoulders but also to widen the roof as well. Inside the building, on each of the side walls, are three small projecting brackets or platforms for statues, the middle one on each side being six inches lower than those at the ends. A noticeable feature in connection with each of the four Corinthian columns on the inside, which supported the roof, is that about two feet below the capitals a beautiful sculptured wreath runs around the column. The top of the niche opposite the entrance is shell-shaped and finely executed.

The Praetorium at Musmiye (Fig. 1) was built entirely of local basalt, using finely smoothed ashlar blocks and roof slabs, all set in dry masonry, except for the mortared central vault. This is the traditional building technique of the Hauran, no doubt introduced in the region during Ptolemaic rule in the third century B.C.E.

The outside measurements were 22 m long and 14.5 m wide. (The inner width of ca. 13.10 or 13.30 m would leave a plausible wall thickness of ca. 0.70 or 0.60 m.) The tripartite ground plan of this monument exhibits a central square, entered

from a portico on one side and opening on the opposite side to an apse on axis flanked by rooms. The depth of the apsed rear part equals the depth of the portico front. The portico (ca. 4 m deep; Fig. 2) consists of six columns, the central pair more widely spaced (ca. 2.50 m, 4.30 m). The exceptionally high pedestals (more than a man's height) supported unfluted Roman Doric columns which carried the entablature, consisting of an architrave, a plain pulvinated frieze, and a cornice. The wider gap between the central columns was spanned by a shallow arch carrying the same entablature. The roof of the portico, extending back to the facade wall, was made of long stone slabs. The facade wall, divided into three vertical fields, had a portal in the center, almost as high as the portico roof, surmounted by a pulvinated frieze flanked by brackets and a cornice. This cornice was continued on both sides to the full width of the facade so as to support the other end of the portico roof slabs. Above the portal cornice there was an arch, parallel to that on the front, serving as a relieving arch over the lintel, as the main window, and as the support for the portico vault cover slabs. The two side fields of the facade wall were divided horizontally with an entrance below and a tetrastyle "Syrian gable" aedicula above. The portico and facade wall seem to have had an attic, a few stones of which survived. However, a pediment such as the one surmised by J. Durm (followed by Weigand), is unlikely, as there is no evidence for one in situ or in the fallen architectural fragments seen in front of the building. Further, such a pediment would call for an unnecessary wood and clay tile gable roof over an already stone-covered building.⁸

The back part of the building (Figs. 3–5) consists of a central apse (ca. 4.0 m wide, ca. 2.0 m deep, behind an arch ca. 1.15 m deep) topped by a half dome, its scallop beautifully carved on the underside of the curve-cut stones. The apse is flanked on both sides by rectangular cabinets (ca. 2.5 × 3.2 m) in two levels, together reaching the height of the apse. Their four openings have sculptured decorative frames. A door probably

⁸J. Durm, *Die Baukunst der Etrusker und der Römer: Handbuch der Architektur*, 2nd ed., II, 2 (Stuttgart, 1905), 402, fig. 466. In the temple at Slem, the attic on the facade has partly survived; the pediment and gabled roof in Butler's reconstruction drawings (ill. 320, pl. xxvi) are incorrect. Photographs show that only small "broken pediments" decorated the corners of the attic (photos of the Institut français d'archéologie, Beirut, nos. 62, 63, copies of which are at Dumbarton Oaks).

connected the apse to the room on the right. This early development of the typical Byzantine apse-between-rooms sanctuary plan has been aptly explained by J. Lassus as the outcome of the inclusion of the apse within the rectangle. The Musmiye sanctuary design was copied exactly in the temples of es-Sanamein and Slem.

Whereas the typical Roman Syrian temple front of Musmiye and the sanctuary plan pose no problems of interpretation, the main part of the building, the hall itself, has not been satisfactorily defined or explained in previous scholarship. It is square in plan (in de Vogüé's plan, published at a scale of 1:200, one measures ca. 13.30 m; Weigand preferred 13.11 or 13.0 m, which more closely equals 44 Roman feet), divided by the layout of sixteen columns into a central square (ca. 5.3 m sq.; according to Weigand, 22 feet) and ambulatory bays. The plan and design are better understood if read from the frame inward: in each corner of the hall stood four columns arranged in a square (about 4 m on a side or 11 feet, and 5.3 m apart). The columns, standing on pedestals, carried Corinthian capitals each surmounted by a flaring impost. Every group of four columns is topped by four architraves arranged in a square, and they, in turn, support long stone roof slabs that span the square frame (best seen in the Bankes Collection drawing, Fig. 4⁹). Thus four tetrastyle stone canopies were created in the corners of the hall.

The roof of the hall was built in the following manner. The ambulatory gaps between the tetrastyles were spanned by four vaults, each constructed of two parallel arches, resting directly on the imposts. The distance between each pair is covered by stone roof slabs. Except for the four columns in the corners of the hall, each of the outer columns was the spring of one arch, and every one of the four inner columns carried two arches, perpendicular to each other. The four inner arches, surrounding the central square, carried vertical walls up to a level just above the keystone.¹⁰ These walls were crowned by a molded stringcourse. The square drum thus created was covered over by a mortared four-sided cloister vault. The shape of the central vault, which had collapsed by 1830, can be clearly established by the stumps seen in the drawings. A chunk of its rubble-mortared core is

showing, above the roof, in the 1875 photograph of the front (Fig. 2).¹¹

Some disputed points need further clarification before our main subject can be addressed. Hill, refuting Weigand's suggestion that the columns of the hall were added in the Byzantine period, showed that an original bonding existed between the column and the wall at its back, clearly seen by the same coursing for both in the 1875 photograph of the interior (Fig. 5). He has gone too far, however, in claiming that the columns adjacent to the walls were attached semi-columns. The photograph shows otherwise: there is a shadow on the back of the column, seen on the left, and the joints between wall stones and column are seen in some of the courses. Needless to say, all the nineteenth-century drawings clearly show the columns carved in the round.¹² Moreover, the top side of a semi-column would not have been sufficient for placing two architrave ends and an arch on it. At best, one can define these columns as engaged columns—carved almost completely in the round but with possibly some courses cut from and bonded with the wall stones. The use of engaged columns became very common in Roman Imperial architecture, especially in gates, scaenae frons, and nymphaea.

While it is certain, therefore, that the columns were originally designed and constructed together with the building, Weigand presented a strong case for the imposts on top of the Corinthian capitals having been added no earlier than the middle of the fifth century, during the process of converting the building into a church. The imposts support the entire roof construction, which must therefore have been built in the Byzantine period.¹³ However, the blocking of the huge main

⁹J. W. Crowfoot, *Early Churches in Palestine* (London, 1942), pl. viiia. The collection is kept at the Griffith Institute, Ashmolean Museum, Oxford; cf. *Archaeology* 13 (1960), 229.

¹⁰Fig. 4 is preferred in this detail over Fig. 3, more in conformity to a typical masonry detail of Hauranite architecture.

¹¹Cf. H. C. Butler, *Sardis*, I, 1 (Leiden, 1922), 170–74, ill. 189; K. J. Conant, *A Brief Commentary on Early Mediaeval Church Architecture* (Baltimore, 1942), pl. xiii. Cloister vaults built of stone were recorded in the 2nd-century C.E. theater at Bostra: K. A. C. Creswell, *Early Moslem Architecture*, 2nd ed., vol. I, part 2 (Oxford, 1969), fig. 497. Mortared cloister vaults were found in the mid-3rd-century C.E. bath at Shahaba: H. C. Butler, *Architecture and Other Arts*, PPUAES, Part II (New York, 1904), 384–87, fig. 134. Concrete vaulting is known in the region in the 2nd century C.E.: A. Boëthius and J. B. Ward-Perkins, *Etruscan and Roman Architecture* (Harmondsworth, 1970), 442, 576 note 53.

¹²Including the one not reproduced here of 1827: L. de Laborde, *Voyage de la Syrie* (Paris, 1837), 57, pl. 51. The drawing in M. E. G. Rey, *Voyage dans le Haouran* (Paris, 1860), 55–59, pl. iii, is not accurate with regard to the roof.

¹³F. W. Deichmann, *Studien zur Architektur Konstantinopels im 5. und 6. Jahrhundert nach Christus* (Baden-Baden, 1956), 41–45. In a short notice, A. S. Keck, *AJA* 45 (1941), 97, suggested that the

portal and the arched opening above it, carried out in this same secondary stage, show a rather inferior workmanship compared with the masonry of the arches and vaults on the inside. Moreover, this roof design seems far too sophisticated and unusual compared to other roofing systems found in churches of the Hauran. Unfortunately, no clear solution to this discrepancy can be presented. It is hard, although not impossible, to imagine that the imposts were inserted under an existing roof, held by scaffoldings, as replacements for fissured epistyle blocks. One may assume with better reason that the roof was a careful reconstruction of the original, using the same raw material, with only trivial changes. Yet one cannot completely rule out the possibility that the original roofing system, though based on the same disposition of columns, was different and that the roof described above was adapted to an existing support system by inventive Byzantine masons.

Be that as it may, one may conclude that the original design at Musmiye most likely consisted of four tetrastyle structures connected by arches probably supporting a central vaulted or domed roof. The origin of this particular design one must now set out to find.

The observation noted above, that all the columns, including those placed along the walls, are carved in the round, strongly indicates that they were envisioned as freestanding. Though tied in construction, they are distinct and independent of the walls. Indeed, in both plan and elevation, the four groups of four columns closely resemble a tetrakionion encased in a stone box.

Tetrakionia are a subtype of the tetrapylae or quadrifrons—four-way passage structures—standing at the intersection of thoroughfares in Roman cities.¹⁴ The tetrakionion subtype is known in the eastern Mediterranean and especially from the Levant. This type always consisted of four podia, set in a square plan, with four columns posed on top, at the corners of each podium. Archaeological remains of four such structures were discovered at Gerasa, Shahaba, Anjar, and Palmyra.¹⁵ Those at Gerasa and Palmyra are dated to the

middle and second half of the second century C.E., respectively. The tetrapylon at Shahaba is presumably from the days of Emperor Philip the Arab (247–249 C.E.). While the tetrapyla at Gerasa and Shahaba did not survive above their podia,¹⁶ those of Palmyra and Anjar had enough architectural fragments left to make their reconstruction possible.

The tetrakionion at Palmyra, thoroughly studied in connection with its reconstruction in 1963 by A. Ostrasz, merits a short description.¹⁷ Set on the corners of a platform measuring 12.90 m sq. are four square podia 4.3 m sq. and 2.65 m high (cf. 13.3 m and 4.0 m at Musmiye). Each podium carries four columns at its corners (axial intercolumniation 3.02 m) and an altar in the center. The Corinthian columns stand on Attic bases and carry architrave and frieze blocks arranged in a square frame parallel to the sides of the podium. The upper frame is closed from above by three cornice slabs, each 1.42 m wide. The combined reconstructed height of the monument is 10.56 m. The limestone entablature blocks were tied by dowels, mortices for which were found on their hidden surfaces. Ostrasz comments that such holes and lines, found on the top side of the cornice slabs, indicate that there were more parts to the structure above this canopy. Unfortunately, no evidence was gleaned pertaining to their shape.

The tetrakionion at Anjar is basically similar to the one at Palmyra. Set on a ca. 12.4 m square (measured from the 1:200 plan), the podia are smaller (ca. 2.90 m sq., 1.74 m high) and more widely spaced (ca. 6.65 m). Unlike Palmyra, the Corinthian columns stand on pedestals, the architrave and frieze are carved in the same block, and both frieze and cornice are plain. The reconstructed height of the monument is ca. 8.90 m.

The mid-second-century tetrapylon discovered in Aphrodisias, in Caria, is somewhat different from the examples described above.¹⁸ Instead of the four separate podia, there are two low, rectangular, and parallel stylobate platforms, each of

earlier of the two phases evident in the structure is of pre-Antoine date. This now seems untenable.

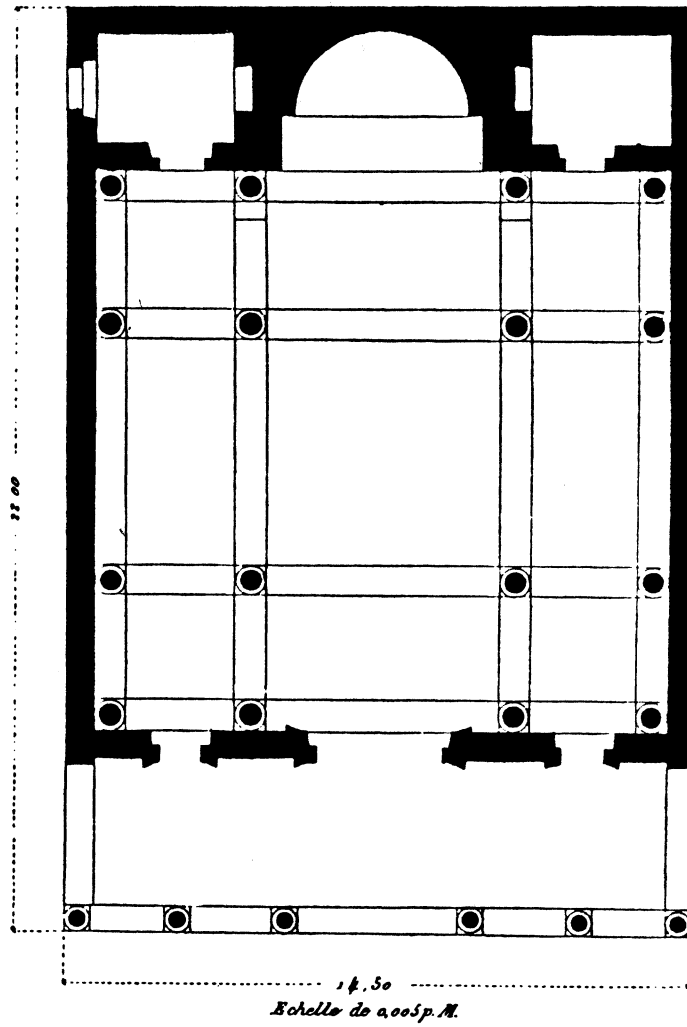
¹⁴W. L. MacDonald, *The Architecture of the Roman Empire*, II: *An Urban Appraisal* (New Haven-London, 1986), 87–92.

¹⁵C. H. Kraeling, *Gerasa, City of the Decapolis* (New Haven, 1938), 104, pls. xvi, xviii, plan xii. Shahaba: Butler, *Syria* (1903), 376, 393, fig. 130. Anjar: Creswell, *Early Moslem*, 480, fig. 541, pl. 78Ca. Palmyra: O. Puchstein in Th. Weigand, *Palmyra*, text vol. (Berlin, 1932), 24 f, figs. 23–25.

¹⁶The four podia at Gerasa are set on a square of 14.20 m: each is 4.10 m sq. and 3.30 m high. At Shahaba the square is 18.85, the podia each 5.60 m sq., ca. 4. m high, and 7.65 m apart. The intercolumniations between the columns supposedly set on the corners of the podia at Shahaba are impossible to span by stone architraves. These podia seem therefore to have been continued upward as solid pillars of a *quadrifrons*; see below.

¹⁷A. Ostrasz, "Études sur la restauration du Grand Tétrapyle," *Studia Palmyrenskie* 1 (1966), 46–58; H. Klengel, *The Art of Ancient Syria* (London, 1972), 160.

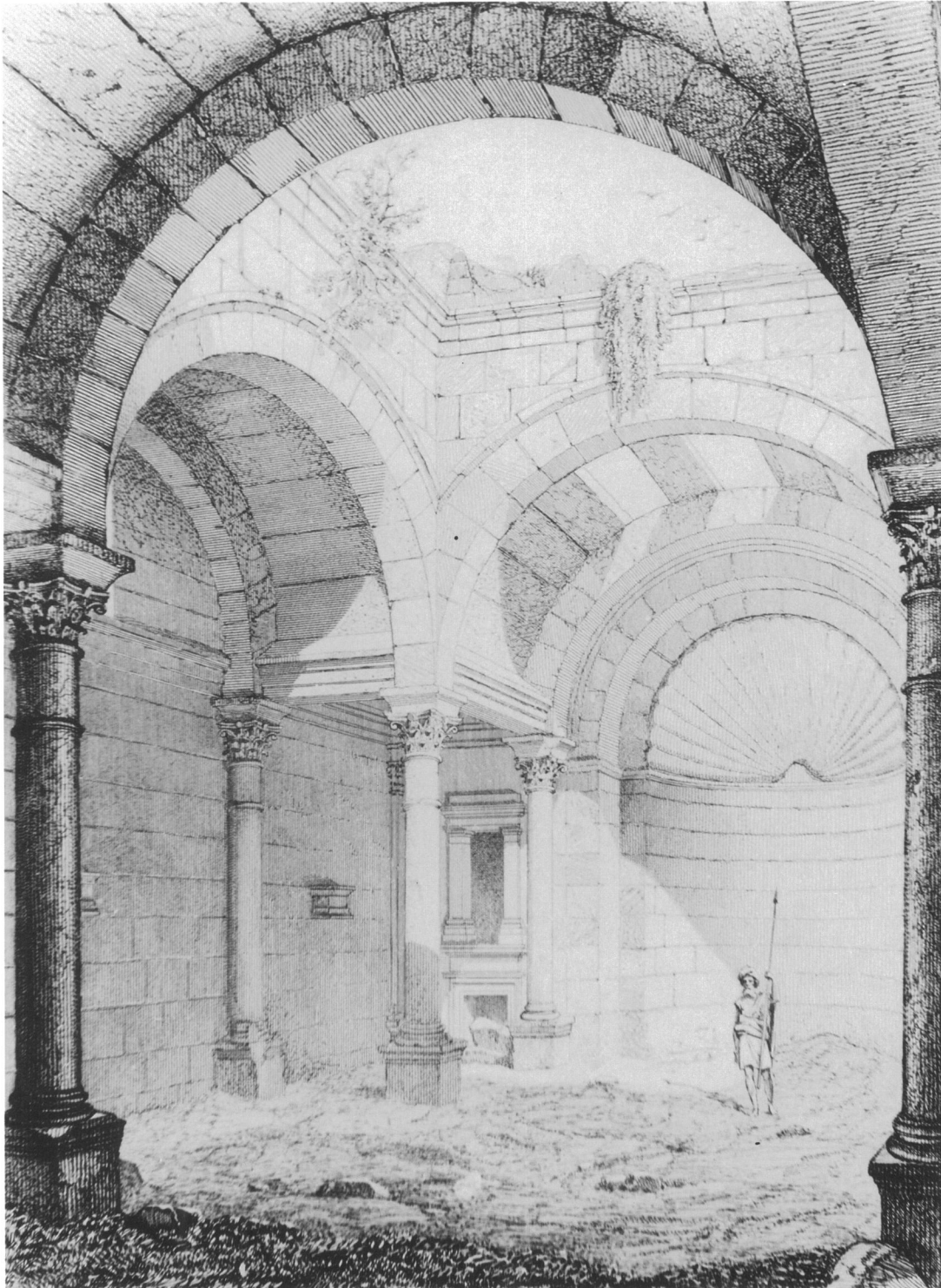
¹⁸K. T. Erism, *Aphrodisias, City of Venus Aphrodite* (London, 1986), 60–61, 181. No plan or measurements are furnished.



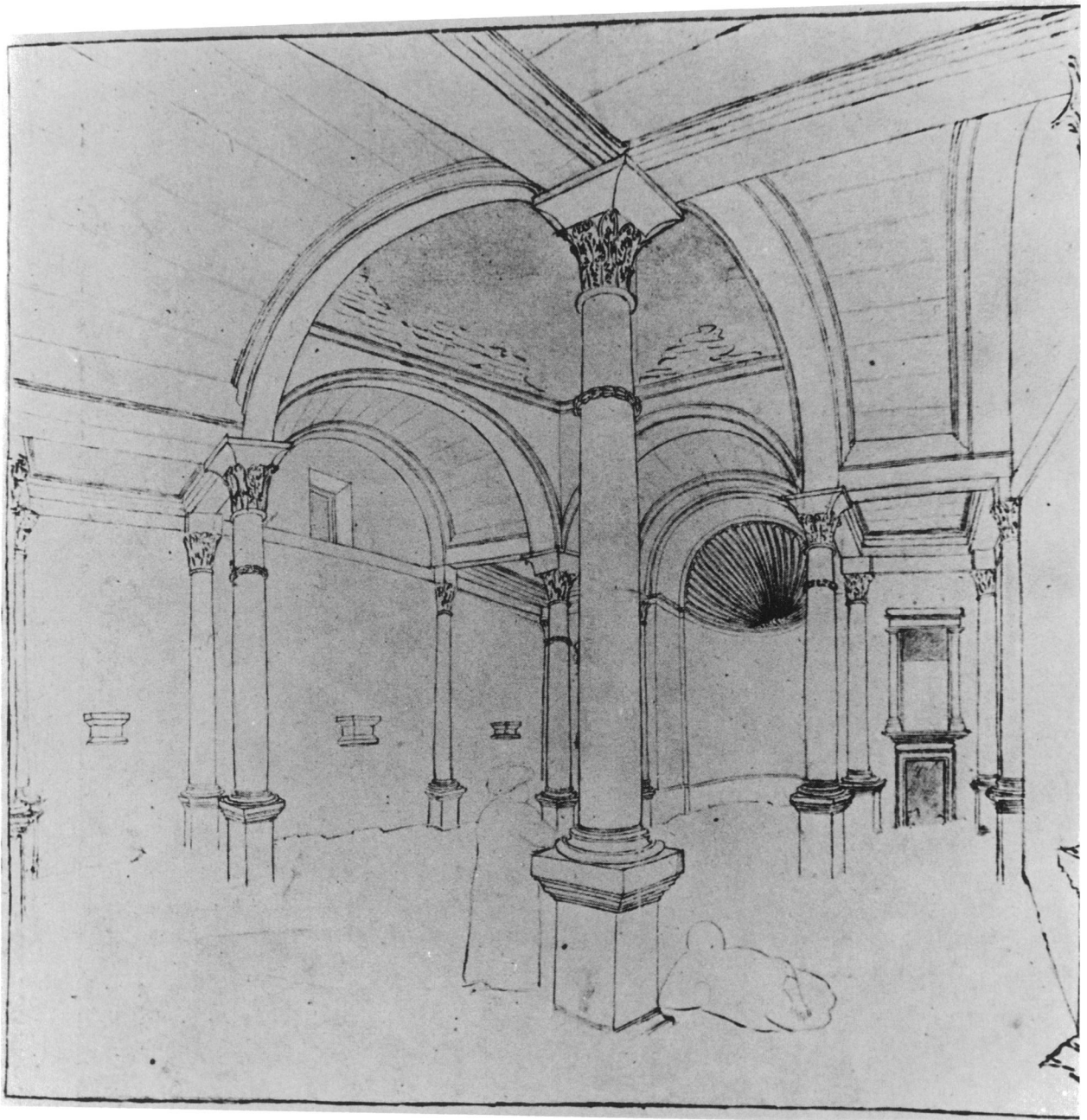
1 Musmiye, ground plan (after de Vogüé)



2 Musmiye, the facade in 1875, photo of Dumas (Dumbarton Oaks D.73.347[PT])



3 Musmiye, interior (after de Vogüé)



4 Musmiye, interior, drawing in the Bankes Collection (after Crowfoot)



5 Musmiye, interior in 1875, photo of Dumas (Dumbarton Oaks D.73.353[PT])



6 Berytus, Elagabalus (218–222), gate (after Price and Trell)

which supports two rows of four columns, for a total of sixteen columns in four parallel rows. A narrow north-south road passes between the stylobates. The main axis of the monument is, however, perpendicular, for it presents two ornate gates toward the east and the west. Each gate consists of two tetrastyles, the columns of which, standing on pedestals, are fluted (the first and third row in spirals; the shafts of the fourth row are smooth) and carry Corinthian capitals surmounted by architraves. More important for the issue dealt with here, however, is the fact that, according to the restoration drawings of A. Machatschek, based on the study of the architectural fragments, each gate was surmounted by an arched pediment ("Syrian gable"), constructed of stone. The arch spanned the passage between the two, more widely spaced columns, in the center of each gate. The discussion of side elevation and possible wooden roof must await a further, more detailed publication of this magnificent monument.

In terms of design, construction, and even size, the four tetrastyle canopies inside the hall at Musmiye resemble the tetrakionia structures described above, built in the same century. One is therefore tempted to conjecture that the tetrakionia, likewise, were covered by a dome supported on arches.

Th. Weigand, discussing the tetrakionion at Palmyra, ruled out the possibility that it carried a dome.¹⁹ He believed that this type was different from both the Western quadrifrons, derived from four triumphal arches set in a square and covered by a dome, and from the Oriental (Persian) tetrapylon—a chamber built on an intersection with four openings. The tetrakionion, according to Weigand, developed from Hellenistic tetrastyle pavilions of decorative use. However, the disposition of four such pavilions in the intersection of colonnaded thoroughfares and the function of these structures as urban passageways have no Hellenistic antecedents. Rather, they seem to have developed as a variant of the Roman domed quadrifrons and are perhaps a translation of a West Roman form into local Hellenistic architectural vocabulary. Roman triumphal arches were constructed in the Syria-Palestine region from the time of Augustus onward. H. Kähler lists examples of these from fifteen places, extending from Antioch through Petra.²⁰ At Antioch a tetrapylon is re-

corded by Malalas (328.3), and another survived at Lattaqiye (Laodicea ad Mare).²¹ It is an oblong ashlar-built structure (wall thickness ca. 1.40 m), topped by a stone dome on an octagon (9.70 m diam.). The two main facades have a high arched opening (7.80 m wide) flanked by attached semi-columns carrying an entablature. Above is a two-tiered attic decorated by a pediment. The other two fronts have lower, arched entryways (4.48 m wide).

A similar form of a simple triumphal arch, one with a single opening having on each side a pair of semi-columns set on podia (Kähler type III, no. 10–16), known from Western Europe through the Balkans in the first and early second centuries C.E., may have been the prototype for the Eastern tetrakionion type. A trend toward thinner, loftier arch structures, evident in the tetrapylon of Trajan in Leptis Magna, the arch of Hadrian at Athens, and the quadrifrons of Marcus Aurelius at Tripoli and Leptis Magna, may have led to the development of an arched structure supported only by freestanding columns.²²

A coin of Elagabalus from Berytus (Beirut) seems to portray the local version of such gateways: it may well be a facade of a tetrakionion (Fig. 6).²³ Two podia, with some decoration on the die, each carry two columns topped by capitals, which support a three-member entablature. The entryway in the center is covered by an arch, described in two parallel lines, rising above the two innermost columns. Unlike the arch in Roman triumphal gates, circumscribed between the columns and below the entablature, the arch on the Berytus coin springs from the cornices of the pavilions. Unknown, cart-like objects are posed on top of the columnar structures, and a figure of a rider on a lion or panther is shown above the arch.²⁴ A statue of Marsyas is housed beneath the arch.

The tetrakionion at Palmyra could have been topped by similar arches. The spans at the cornice

¹⁹De Vogüé, *Syrie*, 75 f, pl. 29; Creswell, *Early Moslem*, 455, figs. 502–3.

²⁰L. Crema, *L'architettura romana. Enciclopedia Classica*, sez. III, vol. XII (Torino, 1959), figs. 570, 576–78; S. Aurigemma, *L'arco di Marco Aurelio e di Lucio Vero in Tripoli* (Rome, 1938); G. Ioppolo, "Introduzione all'indagine stratigrafica presso l'arco di Marco Aurelio a Leptis Magna," *Libya Antiqua* 6–7 (1969–70), 231–36, fig. 2, pl. LVIII. Cf. also Nauman's reconstruction of Theodosius' arch in Constantinople: W. Müller-Wiener, *Bildlexikon zur Topographie Istanbuls* (Tübingen, 1977), 263, fig. 298.

²¹G. F. Hill, *British Museum Catalogue. Coins of Phoenicia* (London, 1910), 81, pl. x, 9–11; M. J. Price and B. L. Trell, *Coins and Their Cities* (London, 1977), 155, fig. 276.

²²The tetrapylon at Antioch probably was topped by statues of elephants, thus supplying its name.

¹⁹Weigand, *Palmyra*, 164.

²⁰"Triumfbogen (Ehrenbogen)," *RE* 7, A1 (Stuttgart, 1939), 373–493.

level, reduced to 2.9 m by the 5.70 m sq. cornice platforms, could easily be bridged by stone arches. This suggestion is now strengthened by the finds from Aphrodisias described above. The square thus formed could support a closing roof.²⁵ The tetrakionion then would function as a domed passage structure over the main intersections much like the quadrifrons.²⁶

Dome-like passage structures (kippa) are mentioned in the streets of Caesarea Maritima and of Tiberias by the Jewish Rabbinic sources.²⁷ These allusions add to a growing body of evidence all suggesting that quadrifrons and domed tetrakionia were not infrequent in the cities of the Roman Levant.

The cross-in-square columnar design encountered at Musmiye is therefore not unique, for it is derived from the popular roofed and domed tetrakionia. The process by which an outdoor mon-

ument was transformed to create an interior space is hard to assess. One is reminded of the theory explaining the derivation of the basilica from the stoa, or the example of the transference of the exterior "column display" (e.g., scaenae frons, gates) into the Marmorsaal of bath buildings.²⁸ In the case of Musmiye, it seems that both structural and symbolic values were considered. The stone-built, domed tetrakionion, as a system of roofing a sizable area, must have appealed to the Musmiye architect as a particularly adaptable method for the traditional masonry techniques of the Hauran. Further, the symbolic values of the triumphal arch and the dome, brought to bear on the interior space, seem also to have played a part in this borrowing. This notion is also hinted at by the four wreaths decorating the shafts of the four central columns of the hall.²⁹ Indeed, this interpretation might even tip the scale for identifying this monument's function as a praetorium. One should, however, be very hesitant when interpreting symbolism as evidence of function.

All told, we had better regard the enclosure of a tetrakionion within walls at Musmiye as an imaginative architectural experiment. Changes in the disposition of columns, evident in the closely similar temples at es-Sanamein and Slem, suggest that this architectural solution was not wholly satisfactory. Only future excavations in these temples may prove whether the dome-on-a-cross design took roots in the Hauran or whether it had to wait until Byzantine times.³⁰

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²⁵ This roof was a dome most likely built of stones, all of them robbed for re-use, as was probably the original dome at Musmiye. The quadrifrons at Lattaqiye and Tripoli demonstrate stone domes on rather thin supports, and this technique seems more at home in the Levant. Lateral thrusts and tensions could have been contained by a pediment or attic and the extensive use of metal ties. However, if the spans proved too wide, tetrakionia may have been roofed by wood or concrete. Cf. R. J. Mainstone, *Developments in the Structural Form* (Cambridge, Mass., 1975), 38–44; K. Michalowski, *Palmyre, II: Fouilles polonaises 1960* (Warsaw, 1962), 9–41, figs. 2–4; Creswell, *Early Moslem*, I, 116–21; E. Langlotz, "Zur Entstehung der Pendentif-Kuppel," *Festschrift Carl Weickert* (Berlin, 1955), 35–40; M. Ueblicher, *Das Teatro Marittimo in der Villa Hadriana* (Mainz am Rhein, 1985), pl. 49, 2.

²⁶ D. S. Coralàita, "La situazione urbanistica degli archi onorari nella prima età imperiale," in G. Mansuelli, ed., *Studi sull'arco onorario romano* (Rome, 1979), 29–72. From Diocletian through the Byzantine period, some street intersections could have been decorated by four honorific columns placed in the corners. No longer covered passageways, these tetrastyles represent the end of the tetrapyla development: M. el-Saghir et al., *Le camp romain de Louqsor* (Cairo, 1986), 11 f, figs. 21–23, pls. xvi–xviii. At Ptolemais four columns replace an early, robbed out tetrapylon: C. H. Kraeling, *Ptolemais, City of Libyan Pentapolis* (Chicago, 1962), 81–83, plan ix. It seems that the tetrakionion that was converted to a church at Aphrodisias belonged to this series: R. Cormack, "The Classical Tradition in the Byzantine Provincial City: The Evidence of Thessalonike and Aphrodisias," in M. Mullett and R. Scott, *Byzantium and the Classical Tradition, University of Birmingham 13th Spring Symposium of Byzantine Studies 1979* (Birmingham, 1981), 114–16.

²⁷ At Caesarea a dome is mentioned and also a tetrapylon, both perhaps alluding to the same structure: L. I. Levine, *Roman Caesarea*, QEDEM 2 (Jerusalem, 1975), 38 f.

²⁸ J. J. Coulton, *The Architectural Development of the Greek Stoa* (Oxford, 1976), 180–84; MacDonald, *Architecture of the Roman Empire*, 183–203; Boëthius and Ward-Perkins, *Etruscan and Roman Architecture*, 399–404; F. K. Yegül, *The Bath-Gymnasium Complex at Sardis, Archaeological Exploration of Sardis, Report 3* (Cambridge, Mass.-London, 1986), 133–46.

²⁹ I owe this observation and its possible meaning to Prof. S. Ćurčić; E. B. Smith, *The Dome* (Princeton, 1950), 111, and *Architectural Symbolism of Imperial Rome* (Princeton, 1956), 19–37.

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